```
∠7.1ipmeLande

 IT M I Command Formac:
 4:
 5:
             A COMMAND (command tail) (cr)
 6:
      A CF/M I command line := composed of a command, an optional
 7:
      command tail, and a carriage return. The command is the case or filename of a program to be executed. The optional command tail
 Š.
 9:
101
      cen consist of a brive specification, one or more file
11:
      specifications, and some options or parameters.
12:
17:
     ///2conventions
. - .
                    COMMAND CONVENTIONS
15:
15:
      The following special symbols define command syntam.
17:
18:
      (3)
          surrounds an optional (tem.
19:
           separates alternative items in a command line.
20:
      Sone indicates a carriage return.
I1:
           indicates the Control Key.
22:
     (3)
           substitute a number for n.
.....
      2.
           substitute a string (group) of characters for s.
24;
     43
          substituta an option or option list for c.
     1 type square brackets to enclose an option list.
200
26:
      ()
          type parens to anciose a range of options within an option list.
___
     F 1
         Read-Write attribute - opposite of RO
25:
     S ()
          Read-Only attribute - opposite of RW
SYS System attribute - opposite of DIR
      DIR Directory attribute - opposite of SYS
∑ং:
... preceding element can be repeated as many times as desired.
           wildcard: replaces all or part of a filename and/or filetype.
- Z
      k
---
           wilecard: replaces any single character
Z4:
           in the same position of a filename and/or filetype.
35:
36:
37:
      37/1cotrichars
J3:
35:
      Control Character
                                              Function
40:
41:
      CTRL-A
                moves cursor one character to the left. Banked system
47.
                only.
4.7
44:
      27751-8
                moves cursor from beginning to and of command line and
45:
                back without affecting command. Banked eystem only.
46:
4 7 :
      CTFL-C
                stops axecuting program when entered at the syspam
. J
                prompt or efter STRL-S.
49;
50:
      CTRL-E
                forces a physical carriage return without sending
1:
                command to CF/M 3.
---
EJ:
      ITALHE
                moves cursor one character to the right. Banked system
542
                only.
55.
56:
      delates character at current cursor position if in the
---
                middle of a line. Barked system caly.
29
55:
      DIRL-I same as the TAB Fe,.
```

```
61:
       27-1-1
                 wellete imanación co the left of curair.
 :2:
        moves curson to the left of the command line end sends
 όĪ:
                 powership to TR M T. Line Feet, the same effect as
  4:
 60:
                 carriage return.
 ±6:
       67:
                 deletes therester at cursur and all spanacters to the
 £0:
                 right.
 67:
       same we corriage raturo.
 7C:
 <sup>-</sup>1:
 72:
       DTRL-F
                 echoes console output to the list device.
 73:
 74:
       restarts screen scholling after a CTRL-8.
 75:
       CTELLER
 76:
                 netypes the dhanacters to the left of the corson or
 --:
                 new line; wedates the commend line buffer.
 78:
 79:
       CTF_-5
                 stops screen scrolling.
 30:
 81:
       CTRL-L
                 updates the command line buffer to contain
                                                                      6-3
 22:
                 characters to the left of the cursor; deletes current
 87:
                 line.
 34:
 85:
       CIFL-W
                 recalls previous command line if current line is ampty;
 15:
                 otherwise moves cursor to end of line. CTRL-3,-M,-F,-U
 87:
                 and RETURN update the command line buffer for recall
 33:
                 with CTRu-w. Banked system only.
 89:
 90:
       CTFL-X
                 deleces all characters to the left of the cursor.
 71:
 92:
       // 'ICOFYSYS
 93:
 94:
       Syntax:
 ·5:
 96:
            COFYSYS
 77:
 58:
       Emplanation:
 77:
      COFYSYS copies the CF/M I system from a CF/M I system diskette to
100:
       another diskette. The new disketts must have the same formet as
1.11
102:
      the original system disketts.
103:
104:
       E: ample:
105:
10e:
            A>COFYSYS
107:
108:
      777/1DATE
109:
110:
      Byntaxi
111:
117:
            DATE (CENTINUOUS)
117:
            DaTE (time-specification)
114:
            DATE SET
115:
115:
      Explanation:
117:
      The DATE command lets you display and set the date and time
112:
                                                                       Of
117:
      day.
120:
```

```
121:
       2 TE amples
 .12:
 127:
       ALDATE
 1.14:
 125:
            Displays the current date and time.
126:
127:
      A>DATE C
 128:
129:
            Displays the date and time continuously.
130:
       A>DATE 08/14/82 10:30:0
131:
132:
133:
            Sats the data and time.
134:
1354
       ADDATE SET
136:
            Prompts for date and time entries.
137:
138:
137:
       7//IDEVICE
140:
141:
       Syntax:
142:
143:
               DEVICE ( NAMES : VALUES : physical-de. : logical-dev)
144:
               DEVICE logical-dev=physical-dev {option}
145:
                                            {,physical-dev (aption),...;
146:
               DEVICE logical-dev = NULL
147:
               DEVICE physical-dev (option)
               DEVICE CONSOLE [ PAGE | COLUMNS = columns | LINES = lines]
148:
149:
150:
      Explanation:
--1:
       DEVICE displays current logical device assignments and physical
151:
5.7
       device names. DEVICE assigns logical devices to peripheral
154:
      devices attached to the computer. DEVICE also
                                                             sats the
1 000 000
     communications protocol and speed of a peripheral device, and
155:
      displays or sets the current console screen size.
157
158:
       ///IOptione
159:
                   E XON | NOXON | baud-rate 2
160:
161:
                   refers to the XCN/XCFF communications protocal.
162:
      MCX
163:
164:
                   indicates no protocol and the computer sense data to
      MOXOM
165:
                   the device whether or not the device is ready to
166 i
                  receive it.
167
168:
      baud-rate is the speed of the
                                               device. The
                                                                 ≘ ≠st≘m
149:
                  accepts the following baud rates:
170:
171:
                          550
                                   ---
                                             110
                                                         154
177
                          150
                                   700
                                             500
                                                         1200
177:
                          1800
                                  2400
                                             3600
                                                         4800
174:
                          7200
                                  76QQ
                                             19200
175:
17e:
     // ZEwamples
177:
178:
     APDEVICE
```

180:

Displays the physical devices and current assignments of

```
131:
            the logical devices in the system.
 157:
 18T:
       ANDEVICE NAMES
 184:
18E:
            Lists the physical devices with a submary of the device
186:
            characteristics.
187:
188:
     A DEVICE VALUES
139:
15]:
            Displays the current logical device assignments.
191:
192:
      ANDEVICE CRT
157:
194:
            Displays the attributes of the physical device CRT.
175:
196:
      ADEVICE CON
197:
198:
            Displays the assignment of the lugical device CCN:
199:
ICC:
      ADDEVICE CONGUT: =1,7T, ORT
201:
2014
            Assigns the system consple output (CONGUT:) to the
2)7:
            printer (AFT) and the screen (GRT).
204:
200:
      ADDEVICE AUXIN: =CFT2 (XON, 7600)
206:
            Assigns the admiliar, logical input device (AUXIN: 1)
207:
           the physical device OFT Laing protocol KDW/XDFF and
202:
209:
            sets the transmission rate for the device at 9400.
210:
211:
      AIDEVIOS LET: = AULL
212:
217.
            Disconnects the list output logical delice (LBT:).
314:
2:5:
      ADDEVICE LPT EXON, 94501
216:
2174
           Gets the KOM/KOFF protocol for the physical device LPT
1:8:
           and sets the transmission speed at 9600.
219:
220: A DEVICE CONSOLE SPAGE:
___1:
2111
           Displays the Junnent consule page width in columns and
length in lines.
254:
225:
      AUDEVICE CONSOLE ECOLUMNS=40 LINES=1-1
126:
227:
228:
           Sets the screen size to 40 columns and 16 lines.
220:
      SZ MIDIR
230:
      The DIF command displays the dames of
2211
                                                    files and the
characteristics essociated with the files.
234:
      The DIR propart has three distinct references:
236:
              DIR
2.374
              DIRS
276:
              DIS with Cotions
227
     DIR and DIRS are pullt-in utilities. DIR with Options is
240
```

```
2-1:
       disk. Districtly and rist to loaded into memory from the disk.
 242:
240:
          TEBLILE-1-
 14:
Syntaxi
 I46:
247:
               DIF.
                   ( <u>2 a )</u>
243:
               DIR
                   (filemoec)
249:
250:
               DIFS (da)
DIES (filespec)
ZEZ:
257:
       Explanation:
154:
255:
       The DIR and DIRS Built-in commands display the pames of files
cataloged in the directory of an on-line disk. DIF lists the
257:
       names of files in the current user number that have the Directory
259:
       (DIR) sttribute. DIR accepts the A and T wildcards in the file
209:
       specification.
130:
I61:
       . // TE, amples
I52:
IdI:
      ADDIA
I54:
265:
            Displays all files in user 0 on drive A that have the
266:
            Directory attribute.
267:
268:
      aaDIa B:
I69:
270:
            Displays all DIR files in Lear O on drive B.
771:
272:
271:
       DAVIIR C:ZIFFY. DAT
274:
275:
            Displays the name ZIFPY.DAT if the file is in user I
                                                                     276:
            crive C.
277:
278:
      4A:DIF *.BAS
279:
280:
            Displays all DIR files with filetype BAS in user 4 on crive
231:
282:
280:
      BENDIE AX. COD
284:
285:
            Displays all DIS files in User T on drive B whose filename
ZB±:
            begins with the letter X, and whose three character filetype
287:
            contains the first character C and last character D.
283:
289:
       ADDIES
190:
291:
            Displays all files for user 0 on drive A that have
# 9 = 1
            system (SYS) attribute.
293:
294
      ADDIAS *.COM
295:
295:
            Displays all SYS files with filetype COM on drive A in weer
           C. A command (.COM) file in user O with the system
297:
298:
           attribute can be accessed from any user number on that
299
           drive, and from any drive in the search chain (see SETDEF).
300:
```

```
301:
      - - DwithCation:
 7.2:
303:
      Syntax:
504:
               DIR (d:) (sptions)
305:
Jos:
               DIR (filespec) (filespec) ... (options)
307:
308:
      Explanation:
709:
310:
       The DIR command with options is an enhanced varsion of the DIR
711:
       built-in command and displays your files in a variety of ways.
       DIR can search for files on any or all drives, for any or all
312:
user numbers. One or two letters is sufficient to identif, an
314:
      option. You need not type the right hand square bracket.
315:
316:
      ///3Options
717:
318:
       Option
                                  Function
I19:
320:
       ATT
                  displays the file attributes.
721:
322:
                  displays date and time stamps of files.
       DATE
Augustina ang
324:
       I
                  displays only files that have the DIR attribute.
T25:
IDA:
      DRIVE=ALL displays files on all on-line drives.
727:
328:
       DFIVE=(A, B, C, ..., F)
327:
                  disclays files on the drives specified.
330:
371:
       OF IVE=d
                  displays files on the drive specified by d.
772:
3333
       EXCLUDE displays files that DC NCT MATCH the files
T54:
                  specified in the command line.
3354
       7-F
                  sende an initial form feed to the printer device is
- 7
                  the printer has been activated by CTRL-P.
उद्∂:
                  shows the name, size, number of 128-byte records, and attributes of the files. If there is a directory
       FULL
337:
340 t
341:
                  label on the drive, DIR shows the password
T42:
                  protection made and the time stamps. If there is no
347:
                  directory lacel. DIS displays two file entries on a
744:
                  line, omitting the password and time stamp columns.
345:
                  The display is alphabetically sorted. (See SET for a
345:
                  description of file sttributes, directory labels,
347:
                  passwords and protection modes.)
348:
349:
       LENGTH=n
                  displays o lines of printer output before inserting
J50:
                  a table heading. In is a number between 5 and 45576.
351:
MESSAGE
                  displays the names of drives and user numbers DIF is
353:
                  searching.
: <u>: -</u> 4 :
NCSORT
                  displays files in the order it finds them on the disk.
156:
TELL 1
       EC
                  displays only the files that have the Fead-Orl,
358:
                  attribute.
3E9:
360:
      Filip
                 displays only the files that are set to Fead-White.
```

```
Jul:
 362:
       B17E
                   disclays the filename and size in Filosyles 1:24
 bytes).
 364:
365:
       EYE
                   displays only the Files that have the SVB attribute.
Joot
36":
       USEF=ALL
                  displays all files in all user numbers for the default
3:8:
                   or specified drive.
369:
 370:
                   displays the files in the user number specified by -\infty.
       _EEEE=h
 771:
       USER=(0,1,...,15)
377.4
371:
                   displays files under the user numbers specified.
374:
 375:
        : TExamoles
 776:
377:
       ADDIE C: [FULL]
773:
379:
            Displays full set of cherectaristics for all files in user !
780:
            on drive C.
381:
382:
      ALDIF C: CDATES
354:
            Lists the files on drive C and their dates.
395:
386:
      AVDIR D: CRW. EYSI
J37:
388:
            Displays all files in Lear Con crive D with Read-Write
and System attributes.
্ৰুক্ ্ৰু
39::
       DAUDIR CUSER-ALL, DRIVE-ALL)
792:
397:
            Displays all the files in all user numbers (C-15 in all on-
~=4 ·
            line drives.
395:
396:
      Bardis [enclude] *.DAT
77:
398:
            Lists all the files on drive B in user o that do not have a
उष्ण्यः
            filetype of .DAT.
400:
      BEVOIR CHIZED W.FLI W.COM W.ARM
401:
402:
407:
            Displays all the files of type FLI, CDM, and ASM in leer
            I on drive E in size display format.
404:
465:
406:
       A-DIR [dr:/email wsermail] TESTFILE.BOR
407:
402:
            DIR displays the filerame TESTFILE. BOS if it is found or
407
            any drive in any user number.
41):
411:
      ADDIA Carza, owl D:
412:
4:1:
            DIR lists each Read-White file that resides on Drive D.
4:4:
            with its size in milobytes. Note that D: is equivalent to
41E:
            D: 水。水。
415:
417:
      7.710045
418:
417
      Syntax:
420:
```

```
421:
           DUMF filespec
422:
421:
      Explanation:
4.4:
425:
     DUMP displays the contents of a file in hemadecimal and ASCII
416:
      format.
427:
418:
      E ample:
429:
4364
           ADDUMF ABOUTEX
431:
4.72:
      /./1≢⊴
403:
4 74:
       Format:
435:
4356;
            ED imput--:lespec (d:loutput-f:lespec)
437:
473:
       Explanation:
139:
       Character file editor. To redirect or remains the new version of
440:
441:
      the file epecify the destination drive or destination filespec.
441:
       ://2scmmands
445:
----4:
445:
                              ED Command Summary
446:
447:
448:
      Commend
                            Action
449:
450:
      ત્લ
451:
             append of lines from original file to membry buffer
452:
450 i
       ា∸
454:
             append file watil butfer is one half full
455:
456:
       #44
457:
             append file until buffer is full (or end of file)
458:
4四寸:
       B, -8
4601
             move CF to the beginning (B) or bottom (-B) of buffer
431:
462:
       ಾ⊆, ∸ಗ⊆
             move OF a characters forward (C) or back (-C) through buffer
460:
454:
465:
      ಎ್, −ಎ⊃
4661
            delete n characters before (-D) or from (D) the Co
467:
468:
469
             save new file and return to CF/N-86
470:
471:
       Tetring("Z)
472:
            find character string
473:
474:
475:
             save new file, resdit, use new file as original file
476:
477:
       I Carl
473:
             enter insent mode
479:
480: Istring( Z)
```

```
- 11:
                insert string at DP
4E [ ;
487:
        Jasanch_str Zima_ath Coel_to_ath
454:
                Distances strings
480:
456:
        \bigcap_{i \in \mathcal{A}_{i}} |\mathcal{B}_{i}|_{\Phi_{i}} = \bigcap_{i \in \mathcal{A}_{i}} |\mathcal{B}_{i}|_{\Phi_{i}}
4E7:
               delete (2111) o lines from the Cr
403:
         Maria Mariana Cha
489:
                move CP a lines
\Delta \subseteq \mathbb{R}_2
451:
492:
       nMcommands
4571
                execute commands n times
454:
4ラミ :
        n, -n
                move CP o lines and display that line
4¢5:
477:
478:
        ;" ±
497:
                move to line a
:00:
501:
        :clammand
execute command through line n
2051
504:
       - Matrino[12]
extended find string
506:
5€7:
502:
               return to original file
209:
510:
        rf, -af
511:
                move OF II lines forward and display II lines at console
# 1 T E
517:
514:
                abandon new file, raturn to CF/M-86
EC Z3
514:
517:
               read Xpsssss.LIB file into buffer
E13:
517:
        Mfilespec(*Z)
TIO:
               read filespec toto buffer
5.11
522:
        Saelate string Tinsert string
- - - L
               substitute string
E24:
EZZ:
        of, -of, of
225:
               type n lines
527:
SIS:
        u, −U
529:
               upper-case translation
570:
571:
               line numbering on/off
5321
        OV
533:
               display free cuffer space
TT4:
        \square W
E. ...
               write r lines to new file
Tib:
        ∴W
5777
               write until buffer is half empty
m X
CT7:
               write or append o lines to Xasassas.LIB
```

∵4):

```
54::
       nxf:lespec:22
write o lines to filespec:
E4I:
               appard of previous command applied to make file
14:
515:
        3. 1 TT
546:
              calata -ile x*******...IB
T47:
546,
        Cafilespec(12)
阿耳里音
               delete filespec
\sigma ?
55:
               walt c seconds
mer.
552:
        Note: OF points to the durnant character being referenced in
554;
                the edit buffer. Les C'ID to separate multiple commands
or the same line.
E 12. " 7 .
          /IE. amples
519:
E7 = :
              ALED TEST. DAT
             ALED TEST.DAT B:
ALED TEST.DAT TESTS.DAT
ADED TEST.DAT B:TESTS.DAT
Significant to
5a1:
5c I:
564:
       : larasa
- - -
ები:

    Byntaki

こってに
5-8:
              EFARE (filespec) (CCCNFIFM1)
£59:
570:
       E planation:
71:
STI:
        The EFACE command removes one
                                               or mare files from
                                                                              · =
273:
        directory of a disk. Wildcard characters are accepted in the filespec. Directory and data space are automatically reclaimed
574:
#7 #7 #F
        for later use by another file. The ERASE command can be
576:
       apbreviated to EFA.
577:
578:
      // ZOption
579:
                       cotion informs the system to prompt for verification defore erasing each file that matches the filespec. CONFISM can be
: CONFIRM:
T81:
581:
581
                        spireviated to C.
584:
585:
       / /IE. amples
ଅଥିବ:
587:
       APERASE X FAS
588:
589:
             Famoves the file K.FAS from the disk in drive A.
59):
571:
      A EFA * PEN
TPT
        Confirm (% 'N) ?Y
트쿠즈:
594:
             All files with the filetype PRN are removed from the disk
595:
             in drive A.
574:
E97:
       BUERA A: MYK. * COCNFIRMS
593:
500:
             Each file in drive A with a filename that begins with My lie
200:
             displayed with a question mark for confirmation. Type 7 to
```

```
402:
 617:
       ANERA B: x. x
 5 4:
       Confirm (Y.Ma) 7Y
 605:
∆C÷:
            All files on drive B are removed from the dis .
607:
 60E:
      7/1filespec
 610:
                               FILESPET FORMAT
£11:
       CF'M 3 identifies every file by its unique file specification.
612:
61TE
       which can consist of four parts: the drive specification, the
614:
       filename, the filetype and the password. The term "filespec"
Ξ Ξ:
       indicates any valid combination of the four parts of a file
       specification, all separated by their appropriate delimitars.
615:
      A colon must sollow a drive letter. A period must precede a
417a
6:2:
       filatype. A semicolog must precede a password.
519:
       The symbols and rules for the parts of
621:
                                                                  file
1211
      specification follow:
622:
600:
                  drivesped optional
       singla alpha character (A-F)
filename
                  filerane
                                         1-8 letters and or numbers
625:
      t /p
                  filstype optional
                                         C-T latters end, or numbers
LEESWORD
                                         0-8 letters and/or numbers
                  password optional
627:
618:
      Valid complications of the elements of a CP M T file specification
4.T.F.
      are:
6J0:
631:
                     filename
ATT:
                     o:filemame
6333:
                    filename.typ
d:filename.typ
5II:
                    filerame;password
5 5:
                    d:filensme:password
677:
                    filename.typ;password
≙la:
                    d:filename.typ;password
<u>6779:</u>
      If you do not include a drive specifier. OF/M I automaticall,
640:
£41:
      uses the default drive.
642:
      Some CF/M I commande accept wilcoand (* and ?) characters in the
647:
      filename and/or filetype parts of the command tail. A wildcard
544 :
645
      in the command line can in one command reference many matching
      files on the default on specified user number and drive. 'See
~₹5:
647:
      Commande .
6 f c
647:
       1/1GENCOM
:50:
651:
      Syntail
502:
ć5T.
              GENCOM (COM-filespec) (A5X-filespec) ...
-54
                         CELOADER ! MULL = SCB=:cffset.value:1)
625:
65a:
      - Explanation:
£57:
     XS? Declarate distance for Page 1 appears a sepactal DCM file with attached FSX
653:
     riles. The GENOCH command can also restore a previously
GENCIMed file to the original COM file without the reader and
557:
```

arabe the file displayed. M to keep the file.

6014

```
∷ ⊃ 1 :
      FS\ s.
              SENCOM can also attach passer records to COM files.
662:
663:
       ///2Cptibms
224:
665:
       LOADER
                  sets a flag to seep the program loader active.
လောက်င်း
      NULL
667:
                   indicates that only PSX files are specified. SENCOM
658:
                   creates a dummy COM file for the RSX files. The
                   output COM filaname is taken from the filename of the
669:
57V:
                   first RSX-filespec.
671:
672:
     SCB=(offset, value)
671:
                   sets the System Control Block from the program by
5<sup>--</sup>4:
                   using the her values specified by (offset, value).
675:
676:
      7//IELambles
5<sup>7</sup>7:
      A)GENCOM MYFROG PROGI FROGI
675:
579:
630:
            Generates a new COM file MYFFDG.COM with attached FSX's
121:
            PROG: and PROG2.
6E2:
      ALGENCOM PROG1 PROG2 ENULL]
68I:
634:
685:
            Creates a ICM file FROSI.COM with FSX's PROGI and FROSI.
485:
687: ALGENCOM MYFFOG
683:
68F:
            GENCOM takes MYFFOG.COM, strips off the header and
±90:
            deletes all attached RSX's to restore it to its driginal DCM
691:
            format.
672:
697: ADGENCOM MYFROG PROG1 FFOG2
ċ∍4:
695:
            GENCOM looks at the already-GENCCMed file MYFROE.COM to see
6951
            if PRO51.RSX and PRO62.RSX are already attached RSX files in
697:
            the module. If either one is already attached, GENCOM replaces it with the new RBX module. Otherwise, GENCOM
. 73:
699:
            appends the specified RSX files to the COM file.
700:
701: //16ET
702:
703:
      Syntas:
714:
70E:
       GET (CGNSOLE INPUT FFOM) FILE Filespec(((ECHO:NO ECHO) : SYSTEM3)
704:
       SET (CONSCLE INPUT FROM: CONSOLE
707:
708:
       Explanation:
707:
      GET directs the system to take console input from a file for the
710:
      ne t system command or user program entered at the console.
7111
712:
713: Console input is taken from a file until
                                                          the
                                                                program
714:
     terminates. If the file is exhausted before program input is
      terminated, the program looks for subsequent input from the
715:
7158
      console. If the program terminates before exhausting all its
717:
      input, the system reverts back to the console for console input.
718:
     With the SYSTEM option, the system immediately goes to the
719:
     specified file for console input. The system reverts to the
720:
```

consols for input when it reaches the end of file. Pardirect 721: the system to the console for console input with the SET 772: CONSOLE INPUT FROM CONSOLE command as a command line in the include 727: TI4: file. 7....: 724: // TEEptions 727: 723: ECHO specifies that input is echoed to the console. Thi≡ is the default option. 700: specifies that file input is not echoed to the 77:: NO ECHO . . . . . . . . . . . . conscie. The program cutput and the system prompts are not effected by this option and are still echoed to 700: 7.74: the console. 735: 73a: SYSTEM specifies that all system input is immediately taken 77: from the disk file specified in the command line. SET 738: takes system and program input from the file until the 777 file is exhausted or until GET reads a GET console 740: command from the file. 41: 742: // ZEwamples 743: 744: AVGET FILE XINPUT 745: ADMYFROG 746: Tells the system to activate the SET Lt:1ity. Since SYSTEM 747: 749: is not specified, the system reads the next input line from 749: the console and executes MYPROG. If MYPROG program 750: requires console input, it is taken from the file XINFUT. 7E1: When MYFFOG terminates, the system reverts back to the ~~. consols for consols input. 757: 754: A GET FILE XIND [SYSTEM] -55: 756: Immediately directs the system to get subsequant 757: corsole input from file XINC because it includes the SYSTEM 758: option. The system reverts back to the console for 755: console input when it reaches the end of file in XINI. 760: XIME may redirect the system back to the conscie if it -±1: contains a GET CONSOLE command. 762: 763: AUGET COMEGLE 754: 76E: Tells the eystem to get console input from the consols. This command may be used in a file (previously specified in 767: a GET FILE command, which is already being read by the 758: system for console input. It is used to re-direct the 769: consols input back to the consols before the end-of-file 77): 771: is reached. 772: 1HELF 773: 774: Evntasi 775: 776: HELP (topic) (subtopic) ... subtopic8) ([NOPAGE:LIST]) -77: 778: Explanation: 779:

HELF displays a list of topics and

provides

summar:zed

```
721
       information for SE/M T obviends.
791:
7a0:
       HELF topic displays information about that topic.
734;
       HELF topic subjopis displays information about that subtopic.
785:
786:
       One or two letters is enough to identify the topics. After HELP
       displays information for your todic, it displays the special prompt HSLS or volue suresm. Followed by a list of
750:
7291
       subtapies.
790:
751:
           Enter T to display list of main topics.
721
           Shites a period and subtopic name to access subtopics.
79T:
           Enter a deriod to redisplay what you gust read.
           Fress the RETURN key to return to the OF M I eleter prompt.
794:
        . .
           INDRAGE) option disables the 24 lines per page oppose display.
795:
TE t
           Fress as, wey to a it a displey and return to the HELFI prompt.
70-:
798:
       S.ampies:
~97:
8:::8
            A) HELF
E. . .
            A HELF DATE
2001
            A HELA DIA SPYTONS
            A. HELF LOFTIDHS
804:
            HELF BET
5 6
            HELF BET FASBWORD
            HELF . TABENCRI
80a:
2 . .
            HELF).
808:
            HELF - IT!
± >9 :
810:
      - / · L出EXEED
211:
8:1:
      - ೨೯೮೩ :
- . : : :
8:4:
           rexcom filerane
3.5:
8:5:
       Esplanation:
317:
       8.3:
8:9:
      of HEX input file. It names the putput file with the same
820:
      filename as the induc file but with filetipe .DOM. HE/DOM always
2211
      liphs for a file with filetype . HEX.
800:
827:
      Elancle:
£14:
225:
      ACHEVEDY B: FRESHAM
225:
ar-:
            Denomates a command file ARCGRAM.COM from the input he. Aile
228:
            PROGRAM, HEX.
220:
800:
      - ' limitdia
2.Ti:
831:
       Eyr tall:
533:
834:
           INITDIE (d:)
275:
eTo:
       Emplacation:
237:
      The InitDIR Command initializes a disk directory to allow data
838:
      and time stamping of files on that bisk. D'ITDIA can elso recover
STAR
```

84

time date directory abade.

```
241:
842:
       Example:
245:
844:
           ANIMITDIA D:
345:
           INITDIR WILL ACTIVATE TIME-STAMPS FOR SPECIFIED DRIVE.
846:
347:
           Do you want to re-format the directory or J: (Y/N)?Y
848:
849:
       J//MLIB
250:
8E1:
       Bynta.:
352:
253:
               LIB filespec(CI(M'F'D3)
SS4:
               LIB filespec(CI(M(P3)=filespec(mod)fier)
855:
                                       {,filespec(modifier) ... )
256:
857:
       E.plamation:
255:
855:
       A library is a file that contains a collection of object modules.
      Use the LIB utility to create libraries, and to append, replace,
250:
       select or delete modules from an existing library. Was LIB to
861:
SAI:
       obtain information about the contents of library files.
863:
864:
      LIB creates and maintains library files that contain object
345:
      modules in Microsoft REL file format. These modules are produced
      by Digital Research's relucatable macro-assembler program, FMAC.
266:
567:
      or any other language translator that produces modules in
       Microsoft REL file format.
868:
369:
       You can use LINK-80 to link the object modules contained in a
870:
871:
       library to other object files. LINK-80 automatically selects
       from the library only those modules needed by the program being
872:
973:
       linked, and then forms an executable file with a filetype of COM.
874:
875:
      ///20ctions
876:
877:
          T
                 The INDEX option creates an indexed library file
878:
                 of type .IRL. LIMK-80 searches faster on indexed
879:
                 libraries than on non-indexed libraries.
330:
881:
                 The MODULE option displays module names.
         iri
882:
887:
         Έ.
                 The FUBLICS option displays module names
                                                          and the
884:
                 public variables for the new library file.
885:
886:
          \Gamma
                 The DUMP option displays the contents of object
957:
                 modules in ASCII form.
888:
887:
      ///2Mcdifiers
370:
      Use modifiers in the command line to instruct LIB
B91:
      delete, replace, or select modules in a library file. Angle
872:
      brackets enclose the modules to be deleted or replaced.
893:
874:
      Farentheses enclose the modules to be selected.
895:
896:
                                  LIE Modifiers
997:
89E:
                    Delats
                               <module=>
377:
```

Replace

<p

```
901:
                                  If module came and filename are the
9.7:
                                  same this shorthand can be logo:
904:
905:
                                  <filename)
906:
9074
                      Select (modFIRST-modLAST, mod1, mod2, ..., rod()
908:
999:
       .../IExamples
210:
9111
       APLIB TESTATED
512:
917:
             Displays all modules and publics in TEST4. FEL.
714:
915:
      A:LIB TESTEIP3=FILE1,FILE2
715:
917:
             Creates TESTS.REL from SILEI.REL and FILEZ.REL and displays
diā:
             ell modules and publics in TESTS. REL.
917:
920:
       APLIB TEST="ESTIVECD1.MCD4), TEST2 01-04,04)
921:
9771
             Orestes a library file TEST.SEL from modules in two source
72.3
             files. TEST1.REL contributes MCD1 and MCD4. LIB extraits
924:
             modules D1, D4, and all the modules located setween t en,
975:
             as well as module Co from TESTE.REL.
91c:
927:
      A LIB FILEZ=FILEI MODA= >
າເສ:
929:
             Creates FILES.REL from FILES.REL, omicting MODA which is
771.
             a module in FileT. REL.
971:
911:
       A LIS FILES=FILES YCCA=FILEB.RELL
9003
774:
             Orgates FILES.REL from FILES.REL, FILES.REL replaces NOD...
775:
976: ALLIE FILESFFILES (THISNAME)
777:
908:
             Models THISNAME is in FILEE.FEL.
                                                    when LIE cheates
7.74
            FILES. REL from FILES. REL the File THIBNAME, FEL replaces the
944
             similarly tamed module THISNAME.
741:
942:
      A. LIE FILE: CID-B: FILE: (PLCTS, FIAD, SEASCH-DISFLA/)
743:
944:
             Creates FILE1.ISL on grave A from the selected modules
945:
            FLOTS, FIND, and modules BEAFOH through the module
940:
            DISALA:, in FILER. FEL on orive E.
-A7:
948:
      1LINE
947:
950:
       Symbays
5 · 1 ·
952:
               LINE d: (Filespec, (Coptions 3) =) Filespec (Coptions 3) 1,...)
753:
95143
       Engla: Stroma
955:
      LINE comples relocatable object modules such as those produced by RMAG and Fill-90 into a .COM file ready for
956:
akacution. Relocatacle files can contain external mefemences and
9EE
      publics. Relocateble files can reference modules in library files. LINY agardnes the library files and includes the
ಾದ್ದರ:
990:
```

```
761:
        referenced
                      modules in the output file. See
        Programmenta Utilities Guide For a demplete description of LING-
 962i
 947:
 964:
 965:
        ///massisse
 ≎35:
 9671
        Use LINK option switches to control specution parameters.
 9≟∃:
        uptions follow the file specifications and are enclosed
 969
        within square creares.
                                    Multiple swittings and separated to
 570:
        commas.
 971:
 972:
                                    LINK-BO Cosions
 973:
 974:
                 4
                            Additional mamors; reduces outfer acade
 F75:
                            and writes temporary data to disk
 970:
 977:
                 \mathbf{E}
                            BIOS link in banved CF/M T system.
 978
                            1. Aligns data segment on page boundary.
 979;
                               Puts length of code segment in header.
 990:
                                Defaults to .SFR filetype.
                            ... .
 781:
 982:
                 Dahaa
                            Data origin; sets memory origin for
 ....
                            common and data area
 9841
 9854
                 En
                            Go; set start address to lacel n
 735:
 987:
                 Linhin
                            Load; charge default load address
 789:
                            of midule to book.
                                                  Default 0100H
 987:
 900:
                Mhhen
                            Memory size: Define free memory
 991:
                            requirements for MP/M modules.
 991:
 993:
                ML
                            No listing of symbol table at console
 ≎04:
 955:
                NF.
                            No symbol table file
 776:
 907:
                OC
                            Output .COM command file. Default
 ₽₹3:
 999:
                CF
                            Output .SRL page relocatable file for
1100:
                            execution under MF/M in relocatable
1001:
                            seament
1602:
1007:
                CF.
                            Output .RSP resident system process file
.....4:
                            for execution inder MP/M
1005:
1006:
                            Output . BPP system page relocatable file
                \odot
1007:
                            for elecution under MP/M
1008:
1009:
                PHASE
                            Program prigin; charges default
1.10:
                            program origin address to hihh.
1011:
                           Default is 0100H.
1012:
1017:
                Lists symbols with leading question mank
1014:
1015:
                C
                           Search preceding file as a library
1016:
1017:
                Ф.П.d
                           Destination of conscie messages
1213:
                           d can be X (consciet, Y (printer),
```

or Z (zero butout). Default is X.

1019:

```
1021:
                           Scurce of intermediate files;
                 ĖΙŧ
1012:
                            d is disk crive A-F. Default
1023:
                            is current drive.
1024:
1025:
                           Source of library files;
                季にゴ
1025:
                           d is disc orive A-F. Default
1027:
                           is current drive.
1029:
1029:
                ∌Oc
                           Destination of of object file:
1030:
                           d can be Z or disk drive A-P.
                           Default is to same drive as
1031:
1072:
                           first file in the LINE-80 command.
10TT:
1074:
                $ 9 d
                           Destination of symbol file;
1005:
                           d can be for Z or bisk drive A-P.
1036:
                           Default is to same drive as
1077:
                           first file in LINE-80 command.
10T8:
1079:
       ///CExamples
1040:
1041:
        ADLINK D:MYFILEINPI
1042:
1043:
             LINK-80 on drive A wass as input MYFILE.FEL on drive B and
1044:
             produces the executable machine code file MYFILE.COM on
1045:
             drive B. The [NP] option specifies no symbol table file.
1046:
1047: A>LINK mi, m2, m3
1048:
1049:
             LINM-50 combines the separately compiled files m1, m2, and
1050:
             mT, resolves their external references, and produces the
1051:
             executable machine code file m1.00M.
1052:
1057: ADLINK m=m1, m2, m3
1054:
1055:
             LINK-80 combines the separately compiled files mi, mZ, and
105é:
             m3 and produces the executable machine code file m.COM.
1057:
1058: AXLINK MYFILE, FILES[s]
1059:
1060:
             The [s] option tells LINK-80 to search FILES as a liprary.
1061:
             LINE-20 combines MYFILE.REL with the referenced
             subroutines contained in FILEE.FEL on the default drive
1067:
1043:
             A and produces MYFILE.COM or drive A.
1064:
1065:
       ///lmac
1056:
1067:
       Syntax:
1068:
1067:
           MAC filerane (#options)
1070:
1071:
       Explanation:
1072:
1073: MAC, the CP/M I macro assembler, reads assembly language 1074: statements from a file of type .ASM, assembles the statements,
1075: and produces three output files with the input filename and
      filetypes of .HEX, .PRN, and .SYM. Filename.HEX contains INTEL
1076:
1077: Devadecimal format object code. Filename.PFN conteins an
1079: ennotated source listing that you can print or examine at the
      console. Filename. SYM contains a sorted list of symbols defined
1077:
1080:
      in the program.
```

```
1081:
1082:
        1351
           A) MAC SAMELE
1084:
:085:
1085:
           A MAC BAMPLE #PB AA HB BY
1137:
1088:
        / Captions
1187:
1090:
        Use options to direct the input and output of MAC. Hee a latter
       with the option to indicate the source and destination onlives,
1171:
1092:
        and dossole, printer, or zero output. Valid drive hares and A
        thru D. X. F and I specify conscie, printer, and zero output,
- -
1094:
        respectively.
1095:
            Assembl, Dotions That Direct Input/Output
1096:
14 97:
1649:
                 Source drive for .ABM file (A-E)
1099:
1100:
                 destination drive for .HEX file (A-C. I)
1101:
1102:
                 source drive for macrobiorary . LIB files called o. the
1117:
1114:
                 MACLIE Statement.
1105:
                destination onlie for .FFN Fila (A-C. X. F. Z)
1106:
1107:
                destimation drive for . BYM file
::08:
1109:
1110:
1111:
             Assembly Options That Modif, Contents Of Outout File
1112:
1117:
             lists input limes need from macrollibrary .LIB files
        ← ⊸
1114:
             suppresses listing default)
1115;
1115:
        → ₩
             lists all macro lines as they are processed during asserol
11175
        .....114
             suppresses all macro lines as they are read during assembly
1115:
        *
             lists only be, generated by macro e panelone
1159:
1120:
        +0
             lists all LOCAL symbols in the symbol list
1121:
        -3
             suppresses all LOCAL symbols in the symbol list (default)
1122:
1127:
        + 3.
            sppend= s,mool file to print file
1124
        -S suppresses creation of symbol file
1125:
1125:
        + 1
             produces a pass ! listing for macro depugging in .PSM File
4 4 44 . .
        -1
             suppress listing on pass 1 (default)
1128:
1129:
        C'/IBATCH
1130:
1171.
        9, ta. :
1177:
            FATCH filename(.byg) (6)
1134:
1135:
        E planstion:
1136:
        The PATCH command disclays or installs patch number \tau to the CF'M I system or command files. The patch number house be
11774
1:79:
1177:
        between 1 and TD inclusive.
1140:
```

```
1141:
        E. ample:
1142:
        ALPATCH SHOW I
1147:
1144:
1145:
             Patches the SHOW.COM system file with patch number C.
1145:
1147:
        Z''IFIF (DODY)
1148:
1147:
        Syntali
1150:
1151:
                    DESTINATION
                                             BOURCE
1152:
11ET:
          FIP d: (Sn) ' filespec([Sn]) = filespec([Sl],... : s:{[s]
1154:
1155;
        E.planation:
1156:
        The file copy program FIP copies files, combines
1157:
                                                              files,
        transfers files between disks, printers, consoles, or other
1159:
1159:
        devices attached to your computer. The first filespec is the
1150:
       destination. The second filespet is the source. Use two or more
        source filespecs separated by commas to combine two or more files
1154:
1142:
        into one file. [5] is any combination of the evailable options.
1163:
        The [Gn] option in the destination filesped tells FIF to copy
11:4:
       your file to that user cumber.
1145:
       TIP with no commend tail displays an * prompt and awaits your
1166:
       seriés of commands, entered and processed one line et a time.
1167:
        The source or destination can be any DR/M 3 logical device.
1168:
116F:
       .''(TExamples
1170:
11-1:
        COMY A FILE FROM DNE DISK TO ANOTHER
1172:
1177:
             ADFIF b: Ha: draft, but
1174:
             APPIP bidraft.txt = a:
11TE:
1176:
             BZDFIF myfile.dat=A:CS91
11771
             APPRIN B:: [6]]=myfile.dat
1178:
1179:
      CORY A FILE AND REMAME IT
1190:
1181:
             AE FIF newdraft.t.t=cldraft.t.t
1182:
             CBYFIP b:newpraft.txt=a:oldraft.txt
1197:
        CCFY MULTIFLE FILES
1184:
1135:
             ATFIF b:=draft.*
1126:
1157:
             ATFIP bimx.x
             日"FIF 台: #世: * * *
1169:
1199:
             D'FIF b:=*.t t[g5]
1190:
             Cifif a:=*.com(wr)
             B)FIF a: [g3]=c:*.*
1191:
1192:
1197:
      COMBINE MULTIPLE FILES
1174:
1195:
             AlPIP banew.dat=file1.dat,file2.dat
1176:
      CORY, RENAME AND FLACE IN USER 1
1197:
1198:
1155:
            A pip newdraft.t t[g1]=oldraft.t;t
:0001
```

```
1201:
        CORY, REMAKE AND BET FROM LEER !
1202:
12071
              APPIR newdraft.tut=old-aft.tyt[ai]
1204:
1000
        COPY TO FROM LOGICAL DEVICES
1206:
              Alfis b:funfile.swe=con:
1207:
              AMPIP latifican:
f208:
1....
              ADFIF lst:=b:draft.txtCt81
1010:
              APPIF prosestationata.txt
1711:
1212:
        // Toptions
1213:
        PIP CETICNS
1214:
12151
1214:
             Archive. Dopy col, files that have been changed since the
        ,Α.
              lest copy.
1212:
              Confirm. PIP prompts for confirmation before each file copy.
1219:
        Dr
              Delete any characters past column n.
1220:
        -
             Echo transfer to console.
-
             Filter form-feeds from source data.
1222:
        \Im \alpha
             Set from or go to weer n.
1224:
        ....
              Test for valid Hes format.
        Ŧ
             Ignore :00 Hex data records and test for valid He. format.
distribution in E
        1-
            Mill display of filespecs on console.
<u>:</u>___
             Translate upper case to lower case.
1 ..... m
        -.1
             Number output lines
1009:
        ,...
             Object tile transfer, I ignored.
Bet page length to r. (default c=60)
             Object tile transfer,
1227:
        P:::
12711
        Qs/Z Quit copying from source at string s.
F
             Read files that have been set to SYStem.
8s I Start copying from the source at the string s.
        ن<u>.</u> ت
1277:
             Expand tabs to n spaces.
1274:
        ·)
             Translate lower case to upper case.
ر خواست بسر د
د سار ساست
        V
             Verify that data has been written correctly.
1276:
        ýÝ
             Write over Read Coly files without console query.
, ~~ . !
             Zero the parity bit.
1278:
1227:
       All options except 0,5,%,0,8,V and W force an ASCII file
12401
       transfer, character by character, terminated by a fZ.
1241:
1242:
       -7774EPUT
1243:
1244:
        Eyntax:
1045:
            PUT CONSOLE (CUTPLT TO: FILE filespec (option) | CONSOLE
12461
            PUT PRINTER COLTPUT TO: FILE filespec Contion? I PRINTER
1247±
            PUT CONSOLE (OUTFUT TO) CONSOLE
1248:
1249:
            PUT PRINTER (OUTPUT TO) PRINTER
1250:
1251:
       E placation:
12521
1251:
       FUT puts console on printer output to a file for the helb
1254:
        Lommand entered at the console, until the program terminates.
        Than console output revents to the console. Printer output
1255:
        is directed to a file until the program terminates.
125
1257:
        Then printer output is put back to the printer.
1256.
1259:
       FLT with the
                          SYSTEM
                                  aption
                                              diracts
                                                        all

    Subsequant

       console/printer butgut to the specifies file. This option
12501
```

```
1261:
        terminates when you enter the FLT
                                               TCMSOLE or
                                                             El Linn
                                                                   ESINTES
1242:
       command.
102T:
        A. / / Ingatuana
1254:
1115:
1255:
                   E SECHO : NO ECHO: STILTER : NO FILTER: : CSYSTEM: 3
1067:
1757:
       ECHO
                    specifies that output is echoed to the console. This
1219:
                    is the default option when you direct consols output
1774:
                    tt a film.
---1:
12721
        NO ECHO
                    specifies that file butput is not schoed to the
1......
                    console. NO ECHO is the defeult for the PUT PRINTER
1274:
                    command.
1275:
12741
        FILTER
                    specifies filtering of control characters, which
1 .....
                    means that control characters are translated to
1272:
                    printable characters. For e ample,
                                                              an ESÇala
1772:
                    character is translated to ME.
1220:
1281:
       TO FILTER
                    means that Full coes
                                                ココモ
                                                      translate
                                                                   الايمرام نوات - سو
1222:
                    characters. This is the default option.
1237:
1254:
        SYSTEM
                    specifies that system output as well as program
output is written to the file specified by filespec. Sutput is written to the file until a
1286:
                    subsequent PUT CONSCLE command redirects conscle
1257:
1299:
                    output back to the conscie.
1239:
1271:
       /// IEsapples
1771:
1292;
       ADELT CONSCLE OUTPUT TO FILE YOUT RECHO!
1293:
1274:
             Directs console output to file (CCT) with the output echied
1795:
             to the comecle.
1254:
1297:
       AMPLY PRINTER OUTPUT TO FILE XOUT
.273.
       A: MYEFOG
1299:
177001
             Directs the printer output of program MYFROG
                                                                 to file
17711
             XOUT. The output is not echoed to the printer.
1772:
       ANFUT PRINTER CUTPUT TO FILE XOUTE DECMO, SYSTEMS
1707:
1004:
iTCE:
             Directs all printer output to file XOUTO as well as to the
1705:
             printer (with ECMO option), and the PUT is in effect intil
1307:
             you anter a SUT SPINTER OUTPUT TO PRINTER Command.
:708:
1700
       ALPUT CONSCLE OUTFUT TO CONSOLE
1710:
1711:
             Directs console output back to the consols.
1712:
       ALPUT PRINTER CUTPUT TO PRINTER
1717:
14:
17715
             Directs printer output back
                                             tσ
                                                 the orioter.
1715:
13179
       T/ ISENAME
1719:
1319:
       Synta:
1720:
```

```
1321:
             RENAME {rew-filespec=pld-filespeci;
1722:
1327:
        Emplanation:
:104:
1325:
        FENAME lets ,ou change the name of a file in the director. of
 1221
      disk. To change several filenames in one command use the * or ?
wildcards in the file specifications. The RENAME command can be
1775:
        abbrelisted REW. REW prompts vow for input.
1729:
1330:
1331:
       /// OEkamples
13U2: ADRÉMAME NEWFILE.BAS=CLOFILE.BAS
1334:
             The file CLDFILE.BAS changes to NEWFILE.BAS or drive A.
1335.
1376:
       A' PENAME
1337:
1338:
        The system primpts for the filespecs:
1009:
1340:
                Enter New Name: K. FFM
1341:
                Enter Old Name: Y. PRN
1342:
                      . FRN=X
                                    * FRN
1343:
                A >
1744:
1345:
       File X.FRN is renamed to Y.FRN on drive A.
1346:
1347: BUREN A: FRINTS. NEW = PRINCE, NEW
1043:
1747:
             The file PRINCE. NEW on drive A changes to PRINTS. NEW on
1350:
             drive A.
1351:
1352: ADRENAME S*. TEX=A*. TEX
---3
1754:
             The above command renames all the
                                                        files
. . . . . .
             Ak.TEX to files with filenames Sk.TEX.
1356:
1357:
      ALFEN B: NEWLIST-B: OLDLIST
1T58:
1359:
             The file OLDLIST changes to NEWLIST on drive B.
                                                             Since the
iTac:
            second drive specifier, B: is implied by the first one, it
1261:
            is unnecessary in this example. The command line above has
iTal:
            the same effect as the following:
1363:
1364:
               AVREN B: NEWLIST = OLDLIST
1755:
                          ٥r
1366:
               A) REN NEWLIST = B: OLDLIST
167:
1362:
      // 15MAC
1769:
1370:
       Syntam:
1371:
1372:
            RMAC filespec ($Rd | $Sd | $Pd)
1073:
1374:
       Eaplanation:
1775:
1376a
      FMAC, a relocatable macro assembler, assembles .ASM files of
      into .REL files that you can link to create .COM files.
1 2 7 3
1378:
1379:
       77/2options
1730:
```

```
AMAC potions specify the destination of
1381:
                                                       the
                                                            output
        Replace d with the destination drive letter for the output files.
1787:
1787:
1384:
                           Option
                                           d=output option
1395:
                   F- drive for FEL file (A-0, Z)
1762:
                  S- drive for SYM file (A-E, X, F, Z)
1787:
1388:
                   PH drive for PRN file (A-C. X, P. Z:
1389:
1390:
                   A-C specifies drive A-C.
1791:
                   X means output to the console.
1392:
                   F means output to the printer.
1393:
                   Z means perp output.
1394:
1395:
       //ZExample
1376:
       AUFMAC TEST SPX SB RE
1377:
1198:
1399:
             Assembles the file TEST. ASM from drive A, sends the listing
1400:
             file (TEST.PRN) to the console, puts the symbol file
1401:
              (TEBT. BYM) on drive B and puts the relocateble object
1402:
             file (TEST.REL) on drive B.
1407:
1404:
       CONTRACTE.
1405:
1406:
        ∰yntax:
1407:
1408:
             SÁVE
1409:
1410:
       Exclanations
1411:
141.:
        SAVE copies the contents of memory to a file. To use
1417:
        first issue the BAVE command, then run your program which reads a
       file into memory. Your program exits to the BAVE utility which prompts you for a filespec to which it topies the contents of
14:4:
1415:
141::
        memory, and the beginning and ending address of the memor, to be
1417:
        SAVEd.
1418:
1419:
       ///ZExample
:420:
1441:
             ADSAVE.
1422:
1427:
       Activates the SAVE utility. Now enter the name of the program
1424:
       which loads a file into memory.
1425:
1426:
             A>SID dump.com
1427:
1429:
        Next, execute the program.
1429:
1477:
             #30
1471:
1432:
       When the program exits, SAVE intercepts the return to the system
1477:
       and prompts the user for the filespec and the bounds of memor, to
14741
        te SAVEd.
1475:
1430:
             SAVE Ver T.O
1477:
             Enter file (type FETUFN to exit):dump2.com
1478:
       If file DUMPE.COM exists already, the system asks:
1439:
440:
```

```
1441:
             Deleta dump2.com7 Y
1442:
1447:
       Then the system asks for the bounds of memory to be seved:
1444:
             Beginning hex address: 100
1445:
1446:
             Ending hex address: 400
1447;
1448:
        The contents of memory from 100H (Heradecimal) to 400H is copied
       to file DUMPZ.COM.
1449:
1450:
1451:
       ///13ET
:452:
1453:
       Syntax:
1454:
1455:
                SET [options]
1456:
                SET d: [options]
                SET filespec [options]
1457:
1458:
1457:
       Explanation:
1450:
        SET initiates password protection and time stamping
14614
        files. It also sets the file and drive attributes Read-Write,
1442:
1463:
       Read-Only, DIR and SYS. It lets you label a disk and password
1464 k
      protect the label. To enable time stamping of files, you
1465:
       must first run INITDIR to format the disk directory.
1466:
1467:
       ///2Label
1468:
1469:
      Syntax:
1470:
1471:
                SET (d:) [NAME=labelname.typ]
14725
                SET [PASSWORD=password]
1477:
                SET SPASEWORD=(cr>
1274:
147E:
       ///JE/amples
1476:
1477:
       ADSET ENAME=DISK1001
1479:
1479:
             Labels the disk in the default drive as DISK100.
1430:
1481:
       APSET EPASSWORD=SECRETS
1432:
1485:
             Assigns SECRET to the disk label.
.434:
1485:
       ADSET IPASSWORD-Cark
1486:
1487:
             Mullifies the existing password.
1488:
1429:
       7//2Fasswords
1470:
1491:
               SET [PROTECT=ON]
1491:
                SET EPROTECT=OFF]
1497:
               SET filespec [PASSWORD=password]
14=4:
               SET filespec [PROTECT=READ]
1495:
               SET filespec [FROTECT=WRITE]
14=5:
               SET filesper CPROTECT=DELETE1
1497:
               SET filespec [PROTECT=NONE]
1478:
               SET filespec [attribute-options]
1499
1500:
      ///3Modes
```

```
1501:
15014
                    Password Protection Modes
1503:
1504:
       Mode
                                    Protection
1505:
150e:
        READ
                       The password is required for reading, copying
1507:
                       writing, deleting or repaning the file.
1508:
1509:
                       The cassword is required for writing, deleting
        MEITE
120
                       remaming the file. For do not need a passward to
1511:
                       read the file.
1512:
151T:
        DELETE
                       The password is only required for deleting or
:514:
                       recaming the file. You do not need a password to
151E:
                       read or modify the file.
1516:
1517:
        MONE
                       No password exists for the file.
                                                         If a passwort
1512:
                       password a ists, this modifier can be used to
1517:
                       delete the password.
1520:
1511:
        ///CAttributes
1521
1527:
       F
                       sets the file attribute to Reso-Only.
1524:
ico:
        \Xi M
                       sate the file attribute to Feed-Write.
:=25:
1577:
        \Xi Y \Xi
                       mate the file attribute to BYS.
1528:
1519:
        sats the file attribute to DIR.
imTo:
15514
        ARCHIVE=OFF
                      means that the file has not been backed in
-----
                       (archived).
1531:
1574:
                       means that the file has been backed up (anchived).
      ARCHIVE=ON
ists:
                       The Archive ettribute can be turned on by BET or
15Tc:
                       by FIP when copying a group of files with the FIP
1577:
                       [A] option. SHOW and DIR display the Archive
1538:
                       option.
1539:
1554C:
                      turns or or off the user-definable file attribute
      F1=ON:OFF
1541:
1541:
1540:
       FI=ON!OFF
                      turns on or off the user-definable file attribute
1544:
                      F2.
154E:
1546:
      FU=ON:OFF
                      turns in or off the user-definable file attribute
1547:
1548:
1547:
       F4=CN|OFF
                      turns on or off the user-definable file attribute
1550:
                      F4.
1551:
1550.
       //JEwamples
1555
1EE4:
       SET SPROTECT=ON)
1556:
            Turns on password protection for all the files on the disk.
1557:
            You must turn on password protection before you can assign
1558:
            passwords to files.
```

1559: 1560:

SET IPPOTECT-OFF:

```
1561:
1541:
             Disables password protection for the files on vowe disk.
:563:
15-4:
        ADSET MYFILE. TEX OFASSWORD # MYFILE
155
15ec:
             MYFIL is the issisword assigned to file MYFILE. TEX.
15a7:
1568:
       BREET *.TEX EPASSWORD-SECRET, FROTECT-WRITES
1569:
1570:
             Assigns the password SECRET to all the TEX files on drive B.
             Each TEX file is given a WRITE protect mode to prevent
1571:
1572:
             unauthorized editing.
1573:
1574:
      ACEET MYFILE. TEX SRO SYSI
1575:
1576:
             Sets MYFILE.TEX to Fead-Cnly and SYStem.
1577:
1579:
       ///ZDefault
1579:
       APSET IDEFAULT=dd3
158C:
1581:
1581:
             Instructs the system to use dd as a password if wow ist income
:583:
             enter a password for a password-protected file.
1584:
1585:
       ///GTime-Stamps
1596:
1587:
       Syntax:
1528:
1589:
                SET ICREATE=ONE
1590:
                SET [ACCESS=ON]
                SET [UFDATE=CN]
1571:
1592:
1597:
       Explanation:
1574:
        The above SET commands allow you to keep a record of the time
1575:
157e:
       and cate of file creation and update, or of the last access and
15574
       update of your files.
1578:
1579:
       .//TOptions
1600:
1601:
        ICREATE=ON1
                      turns on CREATE time stamps on the disk in the
1602:
                      default or specified drive. To record the
                      creation time of a file, the CFEATE option must be
160T:
1604:
                       turned on before the file is created.
1605:
1606:
        CACCESS=ONC
                      turns on ACCESS time stamps on the disk in the
1507:
                      default or specified orive. ACCESS and OREATE
1608:
                      options are mutually exclusive; only one can be in
1509:
                      effect at a time. If you turn or the ACCESS time
1610:
                      stamp on a disk that praviously had CREATE
16111
                      time stamp, the DREATE time
                                                             ತ೬≗ೂದ
1612:
                      automatically turned off.
1513:
                      turns on UFDATE time stamps on the disk in the
1614:
       IUPDATE=CN1
1615:
                      default or specified drive. UFDATE time stamps
1616:
                      record the time the file was last modified.
1517:
1619:
      ///TEXamples
1519:
```

ATRET LACCESS-ONS

```
1621:
                  ADSET COREATE=ON, UPDATE=ONI
1621:
1627:
        ///2Drives
1524:
1625:
         27atax:
1526:
1627:
                  SET (d:) SFOS
                  BET (da) [RW]
1429:
1629:
1630:
1671:
         Example:
1572:
1633:
         APSET B: SECT
1634:
1605:
               Sets drive & to Fead-Only.
1636:
1607:
         7//ISETDEF
1638:
1609:
         Syntaxi
1540:
1641:
                  SETDER ( d: (,d: (,d: ),d:)))) (C TEMPORARY = d: 2 '
1642:
                                                     BETDEF EDISPLAY ' NO DISPLAYI
1647:
1544:
1645:
                  SETDEF CPAGE | NOFAGE3
1546:
1647:
        Explanation:
1548:
        SETDER allows the user to display or define up to four drives
1649:
1550:
        for the program search order, the drive for lemporary files, and the file type search order. The SETDEF definitions affect only the loading of programs and or execution of SCEMIT
16E1:
        only the loading of programs and or execution of SUBMIT (508) files. SETDEF burns on/off the system Display and Constle
1450
iet.
1454
         Fage modes. When on, the system displays the location and name
        of programs leaded or SUBmit files executed, and stope after
1655:
16561
        displaying one full consols screen of information.
1657:
1656:
        ::/ZE amplee
1659:
1660:
         AL SETTER
1651:
1652:
              Displays current EETDEF parameters.
1663:
       A SETDER ITEMPORARY=C:1
1664:
1665:
16ec:
              Sets disk drive G as the drive to be used for temporar
1567:
              files.
1668:
1667:
       - ADBETDER C: #
1670:
1671:
              Talls the eystem to search for a program on drive C, ther.
1672:
              if not found, search for it on the default drive.
1677:
1674:
        ADSETDER CORDER=(BUB, COM) ]
1675:
1675:
              Instructs the system to search for a SUB file to execute.
1677:
              If no SUS file is found, search for a COM file.
1679:
1677:
       ADSETDER CDIEPLAYS
1590:
```

```
Turns on the eveter disclay mode. "Herceforth, the exter
1681:
14921
             displays the name and location of programs loaded or submit
163T:
             files e octad.
1.74:
        A SETDER IND DISPLAYS Those off the system Display sode.
1/15
. . . 55:
1437:
        J'''1SHOW
1138:
1589:
        Syntaxi
1670:
1491:
             SHOW Id::: (ISPACE TLABEL TIBERS TDIR (IRITED)
1492:
169Ta
        Explanation:
1194:
1695:
        The BHOW command displays the following dist drive information:
1496:
1697
           Access mode and the amount of free diet space
1493:
           Disk label
1699:
           Current Lagr tumber and
1700:
           Number of files for each water number on the disk
1701:
           Mumber of free directory entries for the disk
17024
           Dr. ve characteristics
1700
1704:
        / DE amples
1705:
1716:
       H BHLW
2707k
1703:
             A SHOW CORPERS
1707:
1711:
             Instructs the system to display access node and amount of
1711:
             space left on logged-in drives.
1712:
1713:
       A SHEW B:
1714:
1715:
             Show access acce for drive B and amount of space left
                                                                         1715:
             drive B.
1717:
1719:
        ALEHOW P: CLARELI
1719:
1721:
             Displays latel information for drive E.
1721:
1722:
        ATSHOW TUSERSI
1723:
1724:
             Displays the current user number and all the users on drive
1725:
             A and the corresponding number of files assigned to them.
1726:
1727:
        AUSHOW C: SDIRD
1718:
1729:
             Displays the number of free directory entries on drive C.
1730:
1771:
        ALSHOW IDFIVES
1703:
             Displays the drive characteristics of drive A.
1774:
1705:
        . /iBID
1776:
1777:
        @yntak:
1738:
17.7
             SID (pgm-filespec) (.sym-filespec)
1740:
```

```
1741:
        Explanations
1742:
        The SID symbolic debugger allows you to monitor and test
1747:
       programs developed for the 8080 microprocessor. 210 supports
1744:
1745: real-time breakpoints, fully monitored execution, symbolic 1746: disassembly, assembly, and memory display and fill functions. 1747: SID can dynamically load BID stillity programs to provide
1743:
        traceback and histogram facilities.
1747:
1750:
      ///2Commands
1751:
1752:
               Command
                                      Mearing
1753:
1754:
            А⊈
                            (Assamble)
                                            Enter assembly language
1.55
                                            statements
175a:
                                            s is the start address
1757:
17E&:
            Cath(,d);
                            (Call)
                                            Call to memory location from SID
1759:
                                            m is the called address
1760:
                                            b is the value of the BC register
1741:
                                            pair d is the value of the DE
1761:
                                            registar pair
1753:
            E(WC(s)(,f) (Display)
1764:
                                            Display memory in hex and ASCII
1765:
                                            W is a 16-bit word format
1746:
                                            s is the start address
1767:
                                            f is the finish address
1768:
1769:
            Epgm-filespac (Load)
                                         Load program and symbol bable
1770:
            C, sym-filespec}
                                            for execution
1771:
1772:
            Exeym-filespec (Load)
                                           Load a symbol table file
1773:
1774:
           F≡, f, d
                            (Fil:)
                                           Fill memory with constant value
1775:
                                            s is the start address
17751
                                            f is the finish address
1777:
1778:
                                            d is an eight-bit data item
1779:
           G(p)(,a(,b))
                             (Sa)
                                           Begin Exacution
1790:
                                            p is a start address
1791:
                                            a is a temporary breakpoint
1782:
1780:
           <del>|--|</del>
                             (₩⊜≾)
                                           Displays all symbols with
1784;
                                            addresses in Hex
1785:
           H.a
                                            Displays hew, decimal, and ASCII
1796:
                                           values of a where
1787:
                                            a is a symbolic expression
1788:
1789:
           M(主,他
                                            Computes her sum ent difference
1770:
                                            of a and b where
1791:
                                            a and b are symbolic expressions
1792:
1790:
           Icommand tail
                            (Input)
                                           Input CCF command line
1794:
1795:
           Light, fo
                             (List)
                                           List 8080 mnemonic instructions
1796:
                                            s is the start address
1797:
```

1798: 1799:

1900:

Me, h, E

(Move:

f is the finish address

s is the start address

Mave Memory Block

1801:			The state of the s
_ 1802:	-		h is the high address of the tip:
# # # # # # # # # # # # # # # # # # #		•	d is the destination start address
1900:			
	೯೯೩೦,೭೦೦	(Fass)	Pass point ast. reset, and display
1875:			p is a permanent breakpoint address
<b>1</b> 576:			w to a partnerst of wat police and make
1872:			c is initial value of pass counter
1808:			
	Ffilespect, st	(Fead)	Read Code Bymbols
1809:			d is an offset to each adoress
1810:			
1811:	S:M: =	(Sat)	Charles Marine and Jan 1
_ 1812:		\ c = \ (_	Set Memor, Values
1817.			s is eddress where value is sent
1814:			W is 16 bit word
·			
1815:	Tini,cli	(Trada)	Trace Prigram Election
1816: 1817:			n is the number of program steps
1817:			to the first comment of the first and steppe
1818:			c is the utility antry address.
<b>-</b> 1819:	T(W) (h(, m))	,	<b></b>
1820:	) ရေး∰သော ရပ်ခို ရရေးသည်။ ကို	(Trace)	Trace Without Call
			W instructs SID act to trace
1871:			subroutines
_ 1812:			n is the number of program steps
1927:			c is the utility entry address
1924:			e va mus critifi, bush' gadusas
1825:	USWD shirters	(Untrais)	<b>.</b>
1926:	and the property of the second of	(which wise)	Monitor Elecution without Trace
1827:			n is the number of progress steps
			C is the utility entery eddages
1938:			W instructs SID not to trace
1809:			subroutines
1930:			
1831:	V	(Va1;_≥)	with the second
1972:		(	Display the value of the next
1877:			evailable location in memory
1874:			(NEXT), the next location efter
			the largest file read in (MSZE),
1975:			, the current value of the Progress
1976:			counter (PC), and the address of
18TT:			the and of excilable memory (END)
e dere:			mid min my exertefre wewchy (myr)
1879:	Wfilespec,s,f	( to the side of t	
1940:	*** ** m m so m m e m e T	7.99F 正左端7	Write the contents of a contiguous
1841:			.block of memory to filespec.
		-	f is finish address
1842:			
1843:	X { # } (r )	(Examine)	Examine/alter CPU state.
1344:			f 2s flag bit 0, I, M, E or I.
1845:			m is magistam A, E, D, H, S on A.
1846:			in an ingawam manakanam ti bir bir
1847:	://2E:amples		
1348:	EB		
	rts in communication and		
1947:	Alsid		
1250:			
1851:	CP/M I loads BID from drive A into memory. SID displays the		
1952:	# prompt when it is ready to accept commands.		
1850:	. H. Amer which is in a carry of screeps innomedge.		
1854:	ACB:SID SAMPLE, MEX		
1955:	で、40mm min は、 型門門をした。 特性的		
1854:	CP/M I loads SID and the chogram file SAMPLE. HEX into memor,		
185-:	from drive B.		
1858:			
1857:	7 Tutilities		
1860:			•

```
SID Ltilicies. HIST.UTL and TPACE.UTL and special programs that
1861:
        operate with SID to provide additional debugging facilities.
1841:
        mechanisms for system initialization, data collection. data display are described in the DF/M BID User's Suide.
1867:
13541
18cT:
1866:
         The HIST utility creates a histogram (ber graph)
                                                                ehowing the
       relative frequency of execution of code within selected program asgments of the test program. The MIST utility allows
134 :
1842:
        you to monitor those sections of code that execute most
1867:
1870:
        frequently.
1371:
1871:
1871:
         The TRACE utility obtains a backtrace of the instructions that
         led to a particular breakpoint address in a program under test.
1874:
         You can collect the addresses of up to 256 instructions
iet:
        between pass points in U or T modes.
1874:
1877:
        77/1SUBMIT
1878:
1879:
         Eyntax:
1990:
1881:
             SUBMIT (filespec) (argument) ... [argument]
1382:
1883:
        Explanation:
1984:
1885: - The SUBMIT command lets you execute a group (batch)
1884:
       commands from a SUBmit file (a file with filetype of SUB).
1887:
1888:
       ///DSubfile
1889:
1890:
       The SUB file can contain the following types of lines:
1891:
1891:
             Any walld CP/M 3 command
1873:
             Any valid CP/M 3 command with SUBMIT parameters ($0-$9)
1894:
             Any data input line
1975:
             Any program input line with parameters ($0 to $9)
1896:
1897:
        The command line cannot exceed 135 characters.
1878:
        The following lines illustrate the variety of lines which may
1899:
1900:
       'be entered in a SUB file:
1901:
1902:
                DIR
1907:
                DIR *.BAK
1904:
                MAC $1 $5$4
1705:
                PIP LST: =$1.PRN: T$2 $5 $5]
1906:
                 DIF *.ASM
1907:
                 FIP
1908:
                KE:=X.ASM
1909:
                 COON: =DUMP.ASM
1910:
1711:
                 DIR B:
1912:
1913:
       // 'ZExecuta
1714:
1515:
       Eyntaxı
1716:
1517:
                EUBMIT
1918:
                SUBMIT filespec
                SUBMIT filespec argument ... argument
1919:
1920:
```

```
1921:
      Examples:
1922:
1923:
                ALGUBMIT
1924:
                ANSUBMIT SUBA
                ADSUBMIT AA ZZ SZ
1925:
                ATSUBMIT BESTAFT DIR E:
1726:
1927:
1929:
        7 1/2FROFILE. SUB
1929:
1930:
        Everytime you power up or reset your computer, CRUM I looks for a
1971:
       special SUBmit file named PPOFILE. SUB to execute. If it does not
1932:
       exist, CR/M T response contal operation. If the PROFILE.SUB file
      ecists, the system election the commands in the file. This file
1933:
      is convenient to use if you regularly a equite a set of commands
1904:
1975:
       before you do your regular session on the computer.
1975:
1977:
       77.1TYPE
1938:
1939:
       Syntax:
1940:
1941:
                TYPE Ifilespec (E PAGE : NOFAGE 313
1942:
1947:
       - Explanation:
1744:
        The TYPE command displays the contacts of
1945:
                                                             æ∩
                                                                    ASCIT
1946:
       thanscten file on your screen.
1947:
1948:
                  Causes the console listing to be displayed in paged
        [PAGE]
1949:
                  mode; i.e., stop automatically after listing n lines
1950:
                  of text, where a normally defaults to 24 lines per
1951:
                  page.
1982:
      ENOPAGE: Turns off Console Page Mode and continuously displays a
1950:
1954:
                  typed file on the screen.
1955:
1956:
       7/ TEramples
1957:
      ANTYPE MYFFOG.FLI
1958:
759:
1950:
             Displays the contents of the file MYFROG.FLI on your screen.
1941:
1961:
       4) TYPE B: THISFILE (FAGE)
1753:
1954:
             Displays the contents of the file THISFILE from drive Book
1765:
             your screen twenty four lines at a time.
1946:
1957:
       ZZZZER
1968:
19491
       Eyntaxi
1970:
1971:
               USER (number)
1972:
1970:
       Explanation:
1974:
1975:
       The USER command sets the current user number.
                                                              The diak
       directory can be divided into distinct groups according to a
1==6:
       "Iser Number." User numbers range from 0 through 15.
1977:
1978:
1979:
       /// IExamples
:930:
```

```
1981: 12:0888
1982: Enter Jser#:5
 1997:
         1794:
 1985:
               The current weer number is now E on drive A.
 1736:
 1997:
        ALUSER T
 1928:
          74>
 1999:
 1990:
                This commend changes the ourment Lear Number to J.
 1991:
 1992:
        / 'IXEEF
 1993:
1594:
         Syntax:
 1995:
1995:
                   XREF (d:) filename (sp)
1997:
 17981
          Explanation:
 1999:
         XREF provides a considerance summary of variable usage in a program. XREF requires the PRN and SYM files produced
2000:
 7771
 2001:
          by MAC or RMAC for input to the progrem. The SYM and FRM files
        mist have the same filename as the filename in the XREF command
----
         tail. XFSF outputs a file of type .XAF.
2004;
 IOOS:
200á:
         Examples:
2007:
2008:
         A) XREF b: MYFFC6
\mathbb{Z} \cup \mathbb{C} \circ_{\mathbb{Z}}
2010: ACXREF b: MYFROS #P
```